

**STATEMENT OF WORK #1**  
**Between**  
**North Carolina Department of Environment and Natural Resources,**  
**Division of Marine Fisheries**  
**And**  
**Pegasystems Inc.**

This Statement of Work #1 ("SOW") is made by and between North Carolina Department of Environment and Natural Resources, Division of Marine Fisheries ("NCDMF", or the "Customer") and Pegasystems Inc., a Massachusetts corporation with its principal place of business at 1 Rogers Street, Cambridge, MA 02142 ("Pegasystems" or the "Supplier"), pursuant to the terms and conditions of the Master Software License, Maintenance and Services Agreement dated October 21, 2015, as amended. This SOW shall become effective on and as of the date of execution by the last signing Party hereto (the "Effective Date"). Once effective, the term of this SOW shall be active from Effective Date and shall continue through 31 October 2016 (the "Term").

**1. Description of Services**

Under this SOW, Supplier will perform the tasks ("Services") described below. Services shall be performed by Supplier pursuant to NCDMF's requirements.

Exhibit A sets forth the invoice schedule for fees.

The Customer is engaging Pegasystems for the implementation of Business Process Management Suite (BPMS) architecture to modernize and replace their Fisheries Information Network (FIN) application.

FIN is a software application that supports the core functions of the NCDMF mission of sustaining marine and estuarine fisheries and habitats for the benefit and health of the people of North Carolina. FIN provides for the sale of new licenses, issuing permits, managing commercial fishing landings data (trip tickets), managing lease and franchise data, recording violation data, incorporating license data issued by the Wildlife Resource Commission, and tracking submerged lands claims. FIN is a modular program written in Microsoft Visual Basic 5.0 with a SQL Server 2008 backend.

Supplier will provide Services to assist the Customer with the configuration and implementation of a Pega application to replace the existing FIN application. This Pega application will be based upon a system transfer of the State of Maine Division of Marine Resources LEEDS application. Pegasystems will deliver a functional FIN replacement system as stated by the requirements specified in the NC DENR DMF FIN Replacement RFP dated December 18, 2014, and as responded to in the Pegasystems response to that RFP.

**Estimated Start Date:** 01 November, 2015

**Estimated End Date:** 31 October, 2016

The project timeline and cost are based upon both parties meeting their responsibilities as outlined in this Statement of Work.

## 2. Supplier Responsibilities

- Supplier will supply the resources listed below for this SOW. The Pega Engagement Leader/Scrum Master must be pre-approved in writing by NC DENR DMF.
- Pega intends to reuse existing functionality from the Maine DMR LEEDS application and/or the Pega Certification and Licensing for Government application to meet many of NCDMF's requirements, such as those around License Application and Issuance, License Management, Customer Information Management, Renewals, Enforcement, Violations, and Code Table Management. Customization and configuration will only be performed when existing functionality either does not exist, or fails to meet specific mission-critical requirements for the FIN replacement application.
- Pega will hold Bi-weekly Governance meetings with NC DMF Business and IT Management Executive Sponsors.
- Implementation of the application, including the UI, will be handled through out-of-the-box (OOB) rules and capabilities provided in Pega 7. Customization will only be performed when OOB capabilities fail to meet specific mission-critical requirements for the FIN replacement application, and application requirements cannot be adjusted to fit the OOB capabilities.
- Pega will implement this project with NCDMF using the Pega Scrum methodology, as specified in the RFP. Any change to that implementation methodology will be made through the change control process, and will be assessed for potential impacts to project cost, schedule, and staffing requirements.

Role	Responsibilities
Practice Leader	<ul style="list-style-type: none"><li>• Project oversight, governance, escalation point, access to key Pegasystems resources when necessary</li><li>• Professional service account management</li></ul>

Role	Responsibilities
Engagement Leader/SCRUM Master	<ul style="list-style-type: none"><li>• Senior on-site representative from Pega; partner with customer program manager to lead the delivery of project</li><li>• Business lead: Coordinate meetings and drive out key business decisions. Meeting facilitator and liaison to the business. Should have domain and application/solution technology knowledge.</li><li>• Supervise execution of Pega delivery</li><li>• Driving methodology and best practice adherence</li><li>• Customer enablement as it pertains to methodology and project delivery</li><li>• Provides thought leadership to the customer with respect to implementing the Pega solution in the customer's operations</li><li>• Manage scope, quality, effort of Pega delivery</li><li>• Manage resources, staffing for Pega business, development and testing teams</li><li>• Develop and manage project plan, risks and issues in Pega delivery</li><li>• Iteration and release scope definition and estimation assistance; assist with scoping and sizing effort for enhancement/change requests</li><li>• Report progress, impediments, and recommended action plans to steering committee on Pega delivery</li><li>• Point of escalation for issues to client program manager</li><li>• Provide SCRUM implementation guidance and best practices.</li><li>• Facilitate communications and interactions between the NC DMF Product Owner and the implementation team.</li></ul>

Role	Responsibilities
Lead System Architect	<ul style="list-style-type: none"><li>• Design Pega application end-to-end; takes the functional design and creates the technical design, conducts code reviews, develops enterprise class structure</li><li>• Reviews infrastructure requirements; data architecture definition; reviews data management plan</li><li>• Drives scope definition workshops and owns delivery of the completed documentation</li><li>• Overall Solution Design Authority and/or support tasked with alignment of business needs, functional and data architecture and technical designs</li><li>• Works closely with customer architects to ensure approval</li><li>• Leads technical team; enables team members and provides knowledge transfer to customer; guides and advises on technical issues</li><li>• Ensures adherence to the Pega development guardrails as well as the original design principles</li><li>• Access Pega's centralized support infrastructure on behalf of the customer</li><li>• Responsible for the overall quality of the solution</li><li>• Provide mentoring, knowledge transfer, best practices, and technical guidance on the Pega 7 platform and CLG application to customer technical resources.</li></ul>
Senior System Architect	<ul style="list-style-type: none"><li>• Technical subject matter expert for Pegasystems</li><li>• Create and modify application flows, decision tables, activities and methods</li><li>• Implement Supplier's Services and connectors</li><li>• Provide mentoring, knowledge transfer, best practices, and technical guidance on the Pega 7 platform and CLG application to customer technical resources.</li></ul>

Role	Responsibilities
Lead Business Architect	<ul style="list-style-type: none"><li>• Lead the business team in gathering requirements and choosing the best way to implement those requirements leveraging the Pegasystems software</li><li>• Facilitates the Direct Capture of Objectives (DCO) sessions and helps business resources prepare for them; ensure the documented Use Cases adequately represent the needs of the business and meet all the requirements</li><li>• Manages and directs all other Business Architects relative to the tasks and priorities, and ensures the quality of the artifacts being produced</li><li>• Assist with the class structure design from the perspective of the business needs</li><li>• Design and configure rules and flows; assist with the draft user interface ("UI") and draft flow development</li><li>• Analyze business data</li><li>• Guide the customer on test and report strategy while maintaining ongoing knowledge transfer to the customer</li><li>• Ensure the business functions of the solution match customer requirements and create and own the design aspect for the enterprise solution</li><li>• Provide mentoring, knowledge transfer, and best practices guidance on DCO, the Pega 7 platform and CLG application to customer business analysis resource(s).</li></ul>

**2.1 Deliverables**

Delivery Milestone	Deliverable	Pega Resources
1	<ul style="list-style-type: none"> <li>• Project kickoff and planning meeting(s) to discuss:               <ul style="list-style-type: none"> <li>○ Scope objectives, issues, and risks</li> <li>○ Project logistics and physical requirements</li> <li>○ Project and team expectations</li> <li>○ Infrastructure requirements</li> <li>○ Cloud requirements and implications</li> <li>○ Database connectivity and requirements</li> </ul> </li> <li>• Scrum Training. A one-week, instructor-led session designed to introduce the Customer's business and technical team to the Scrum implementation methodology, and the implementation of Pega 7 applications using that methodology.</li> <li>• Baseline Application. Pegasystems will provide the complete State of Maine DMR LEEDS application, for use as a baseline application for the FIN Replacement Pega 7 application.</li> <li>• Sprint 0.               <ul style="list-style-type: none"> <li>○ Conduct a detailed review /Gap Analysis of the State of Maine DMR LEEDS application.</li> <li>○ Create User Stories for identified Gaps. It is Pegasystems' assumption and intent to use the Maine application as-is wherever possible. Configuration or customization will only be performed on areas of the application that fail to meet a specific mission-critical functional requirement as defined by DMF.</li> <li>○ Assign user stories to Sprint 1 schedule.</li> <li>○ Develop a notional schedule for remaining sprints required to implement the mission critical functionality required to meet the DMF mission.</li> </ul> </li> <li>• Present application design and architecture to the State Enterprise Architecture and Security and Risk teams for review, comment, and approval.</li> <li>• Weekly Project Status Reports.</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Engagement Leader</li> <li>• 1 Lead System Architect</li> <li>• 1 Senior System Architect</li> <li>• 1 Lead Business Architect</li> <li>• 1 Business Architect</li> <li>• 1 Scrum Instructor</li> </ul>

Delivery Milestone	Deliverable	Pega Resources
2	<ul style="list-style-type: none"> <li>• Sprint 1. Complete. <ul style="list-style-type: none"> <li>○ Finalize User Stories</li> <li>○ Build and test the Sprint 1 finalized User Stories.</li> <li>○ Conduct functional playbacks</li> <li>○ Conduct daily Scrum meetings to review status, and identify issues and roadblocks.</li> <li>○ Assign User Stories to next Sprint.</li> </ul> </li> <li>• Weekly Project Status Reports to be provided on a weekly basis.</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Engagement Leader</li> <li>• 1 Lead System Architect</li> <li>• 2 Senior System Architects</li> <li>• 1 Lead Business Architect</li> <li>• 1 Business Architect</li> </ul>
3	<ul style="list-style-type: none"> <li>• Sprint 2. Complete. – Process repeated as defined within Sprint 1 for Sprint 2 User Stories.</li> <li>• Weekly Project Status Reports to be provided on a weekly basis.</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Engagement Leader</li> <li>• 1 Lead System Architect</li> <li>• 2 Senior System Architects</li> <li>• 1 Lead Business Architect</li> <li>• 1 Business Architect</li> </ul>
4	<ul style="list-style-type: none"> <li>• Sprint 3. Complete. – Process repeated as defined within Sprint 1 for Sprint 3 User Stories.</li> <li>• Weekly Project Status Reports to be provided on a weekly basis.</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Engagement Leader</li> <li>• 1 Lead System Architect</li> <li>• 1 Senior System Architect</li> <li>• 1 Lead Business Architect</li> <li>• 1 Business Architect</li> </ul>
5	<ul style="list-style-type: none"> <li>• Sprint 4. Complete. – Process repeated as defined within Sprint 1 for Sprint 4 User Stories.</li> <li>• Weekly Project Status Reports. To be provided on a weekly basis.</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Engagement Leader</li> <li>• 1 Lead System Architect</li> <li>• 1 Senior System Architect</li> <li>• 1 Lead Business Architect</li> <li>• 1 Business Architect</li> </ul>

Delivery Milestone	Deliverable	Pega Resources
6	<ul style="list-style-type: none"><li>• Sprint Z. Complete.<ul style="list-style-type: none"><li>○ Final system testing and integration testing</li><li>○ User Acceptance Testing</li><li>○ Assist Customer with the development of training materials and with application training of DMF trainers.</li></ul></li><li>• Weekly Project Status Reports to be provided on a weekly basis.</li></ul>	<ul style="list-style-type: none"><li>• 1 Engagement Leader</li><li>• 1 Lead System Architect</li><li>• 1 Senior System Architect</li><li>• 1 Business Architect</li></ul>
7	<ul style="list-style-type: none"><li>• 4-week follow-on Support period complete.</li><li>• Weekly Project Status Reports to be provided on a weekly basis</li></ul>	<ul style="list-style-type: none"><li>• 1 Engagement Leader (part time)</li><li>• 1 Senior System Architect</li></ul>



### **3. NCDMF Responsibilities upon which Vendor performance is conditioned**

- The NCDMF Project Leader will be responsible for engaging the appropriate NCDMF resources to perform the NCDMF responsibilities as set forth in this SOW.
- NCDMF will provide Supplier developers access to the NCDMF development environment as necessary and requested.
- NCDMF will provide the Supplier resources access to the NCDMF building, networks, applications, data, as required and within a reasonable amount of time after the request for such access is received from the Supplier Project Manager.
- NCDMF will provide professional work areas, workstations (laptop or desktop), and logistics support for the Supplier's personnel, including the use of conference rooms (as available), telephone and internet access after adequate notification of resource start date.
- NCDMF will supply project lead, subject matter expert, testing, business sponsor, and process owner resources as needed throughout the duration of this project, including full-time commitment when needed unless superseded by the DMF Deputy Director.
- NCDMF will supply 3 Pega-trained IT developer resources and 1 Pega-trained business analyst on a full-time basis throughout the duration of this project.
- NCDMF resources will attend Pega 7 training prior to project start, as recommended in this SOW.
- NCDMF will be responsible for integration development outside of the Pega architecture and database of record.
- NCDMF will be responsible for SIT and UAT test resources and testing.
- NCDMF will have jointly managed with Pegasystems the delivery and scope of the functional gaps identified in all Sprints under this fixed price Statement of Work
- NCDMF resources, including the Business sponsor, subject matter experts, and the process owner, will be fully committed to the success of this project and available on a full-time basis when necessary unless superseded by the NCDMF Deputy Director.
- NCDMF development resources will have completed the minimum System Architect Essentials I and II for Pega 7 prior to project start.
- NCDMF business and subject matter experts will have completed the Pega 7 Business Architect Essentials course prior to project start.
- Customer will be trained in, and fully committed to, the selected implementation methodology.

### **4. Architecture**

- All Pega related project environments (Dev, Test/QA, and Production) will be hosted on Pega Cloud.
- FIN SQL production database of record will be housed on State equipment in the NC DENR data center.

### **5. Fee Invoice Schedule**

Services will be provided under this SOW for a fixed price of One Million Sixteen Thousand Five Hundred and Sixty Dollars and Zero Cents (\$1,016,560.00), inclusive of expenses. Following Supplier's completion of Services for the applicable and accepted Deliverable, NCDMF will be invoiced for each payment milestone in accordance with the

invoice schedule set forth in Exhibit A. Once due, all fees are nonrefundable and non-cancellable. Payment shall be in accordance with the terms of the RFP.

**6. NCDMF Billing Contact**

Division of Marine Fisheries  
Ruth Risser  
PO Box 769  
Morehead City, NC 28557  
[Ruth.risser@ncdenr.gov](mailto:Ruth.risser@ncdenr.gov)  
252.808.8040

**7. NCDMF Program Managers**

NCDMF Director	Dr. Louis Daniel 252.808.8013 <a href="mailto:Louis.daniel@ncdenr.gov">Louis.daniel@ncdenr.gov</a>
NCDMF Deputy Director	Dee Lupton 252.808.8010 <a href="mailto:Dee.lupton@ncdenr.gov">Dee.lupton@ncdenr.gov</a>
NCDMF IT Section Chief	Al Schmidt 252.808.8120 <a href="mailto:Al.Schmidt@ncdenr.gov">Al.Schmidt@ncdenr.gov</a>
NCDMF Project Leader	Timothy Ladd 919.707.9144 <a href="mailto:Tim.ladd@ncdenr.gov">Tim.ladd@ncdenr.gov</a>

## 8. Change Management

Any additional work beyond the requirements stated in the RFP, or due to delays not caused by the Pega / Accenture team will be managed through this Change Management procedure.

At any time during the term of this SOW, should either party wish to make substantive changes to the project plan or the SOW, or increase or decrease work to be performed by Supplier, or make changes to the scheduled completion date of a deliverable, the parties shall comply with the following change control process:


- The requesting party may submit a written change request to the other party at any time during the course of work under this SOW. The change request will include the change request name, name of requester, request date, and description of the requested change.
- If NCDMF is the requesting party, Supplier will evaluate such change request within three (3) business days following receipt of same. If Supplier determines that the evaluation of the change request will require more than three (3) days to complete, the change request will be referred back to the requesting party with an estimate of the work effort and cost to complete the evaluation process and the requesting party will determine whether to authorize this more extensive evaluation activity.
- The evaluation process will result in a completed change request assessment that includes a description of the business benefits associated with the change request, the impact of the change (including but not limited to cost change, schedule change, quality change, project risk change, etc.) and a sizing estimate that reflects the amount of project team activity required by the change request.
- Both parties shall meet to review the change request and the change request assessment information. NCDMF will determine whether to approve or reject the change request and forward a recommendation to the appropriate party for a final decision.
- If the change request is approved, the appropriate party will update budgets, project plans, and documentation. Neither party shall be obligated under a change request until both parties have approved the change request in writing.

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WHEREFORE, the Parties hereto, intending to be legally bound, have caused this SOW to be executed by their duly authorized officers or representatives.

**PEGASYSTEMS INC.**

**North Carolina  
DENR - DMF**

DocuSigned by:  
  
Signature  
Eric Panepinto  
Name  
VP Pega Consulting  
Title  
10/21/2015  
Date

Signature  
**Dr. Louis Daniel**  
Name  
**Director, NCDMF**  
Title  
Date

**Exhibit A**  
**Payment for Deliverables**

<b>Payment Milestone</b>	<b>Milestone Payment Criteria</b>	<b>Payment Amount</b>	<b>Estimated Invoice Date</b>
1	Completion of Sprint 0	\$155,120.00	31 December 2015
2	Completion of Sprint 1	\$160,680.00	22 January 2016
3	Completion of Sprint 2	\$160,680.00	12 February 2016
4	Completion of Sprint 3	\$160,680.00	04 March 2016
5	Completion of Sprint 4	\$132,960.00	25 March 2016
6	Completion of Sprint Z	\$132,960.00	15 April 2016
7	Completion of Follow-On Support, 4 weeks after completion of Sprint Z	\$113,480.00	13 May 2016
<b>Total</b>		<b>\$1,016,560.00</b>	